Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_ Per.: \_\_\_\_\_\_\_\_

**Similarity and Introduction to Trigonometry Quiz**

1. Midpoint and Distance
   1. Be able to find the midpoint given two endpoints of a segment.
   2. Be able to find the distance given two endpoints of a segment.
   3. Be able to find the other endpoint of a segment given the midpoint and the endpoint.
   4. You will not be given the formulas!
2. Midsegment Theorem
   1. Be able to draw a midsegment given a triangle on a coordinate plane.
   2. Know the relationships created by a midsegment (it is parallel to the third side, it is half the length of the third side)
3. Dilations
   1. Be able to dilate a triangle by a scale factor less than or greater than one.
   2. Be able to find the center of dilation and scale factor given a pre-image and image.
   3. Understand that a scale factor of 1 creates congruent figures.
   4. Understand the relationship between dilation and similarity.
   5. Know that corresponding sides of the pre-image and image are both parallel and proportional.
   6. Know that corresponding points and the center are always collinear.
   7. Be able to verify that the lengths of corresponding sides are proportional by finding the length.
   8. Understand that when the center of dilation is on the pre-image, at least one set of corresponding sides will lie on the same line.
4. Trigonometry
   1. Be able to find a missing side length given a reference angle.
   2. Be able to find a missing angle.
   3. Know the relationship between trigonometry and similarity.